Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
University of Florida	FL	Optical Characterization of Spin Injection in Wide Bandgap Spintronic Devices	ARO
University of Maryland - College Park	MD	Nonlinear and Chaotic Pulsed Microwave Effects on Electronics	AFOSR
California Institute of Technology	CA	Characterization of Ferroelectric and Electro-optic Thin Films	ARO
University of Hawaii	HI	Mesopelagic Processes and Underwater Noise Effects on Marine Mammals	ONR
Columbia University	NY	Spin Dynamics in Ultra-thin Ferromagnets	ARO
University of South Carolina	SC	Ab Initio Molecular Dynamics Investigations of Reaction Mechanisms	ARO
University of Colorado - Boulder	CO	Temporal and Spatial Resolution Studies in the Lower Atmosphere	ARO
Virginia Polytechnic Institute and State University	VA	Parallel Computer	ONR
University of Rochester	NY	Quantum Information Collective Variable Research	ARO
University of Maine	ME	Acoustical and Optical System for Particle Characterization in the Coastal Ocean	ONR
Ohio University	OH	Testing System for Fuel Cell Design and Electro-kinetics Analyses	ARO
Texas A & M University	TX	Extended Dynamic Range Stereoscopic Particle Image Velocimetry	ARO
University of California - Los Angeles	CA	High Throughput Screening	ARO
Duke University	NC	Stereolithography for Rapid Prototyping of Three-Dimensional Optical Systems	AFOSR
University of Arizona	AZ	Deception Detection Integrated Multimedia System	AFOSR
Harvard University	MA	Ultra-fast Mid-Infrared Quantum Cascade Lasers	ARO
University of California - Los Angeles	CA	Sputtering and Dynamic Mechanical Analysis for Thin Film Active Materials	AFOSR
Youngstown State University	OH	High Resolution Multi-Detector for the Study of X-Ray Driven Gamma Emission	AFOSR
Florida State University	FL	Variable Frequency Experimental Bus and Electric Propulsion Emulator	ONR
University of Michigan	MI	Active Control of Vibration and Noise	ARO
Georgia Institute of Technology	GA	Laser System for Atomic Qubit Confinement	ARO
State University of New York - Stony Brook	NY	Instrumentation of Monochromatic X-Ray Side-Station for Melt Property Study	ARO
University of Arizona	AZ	Single-Stroke Intensifier and Hydraulic Pumping System	ARO
University of Michigan	MI	Sum Frequency Generation to Study Biofouling at the Molecular Level	ONR
State University of New York - Stony Brook	NY	High Temperature Micro/Nanomechanics System for Fatigue Study of Materials	AFOSR
Duke University	NC	Large-Bandwidth, Phase-Locked Measurements for High-Speed Flow Research	AFOSR
University of Delaware	DE	Processing and Characterization Equipment for Nanostructured Materials	AFOSR
Princeton University	NJ	Visualization, Imaging, and Power for Plasma and Micro Propulsion Diagnosis	AFOSR
Brown University	RI	White Light Interference Microscope to Study Metal-Polymer Interface Adhesion	ONR
Pennsylvania State University	PA	Six kilowatt Nd:YAG Laser	ONR
University of Notre Dame	IN	Compressor for Turbo-Jet Internal Flow Control	AFOSR
University of Cincinnati	OH	High Pressure Suite for Studies of Molecular Structure and Function	ARO
John Hopkins University	MD	Spectroscopic and Kinetic Studies of Decomposition of Energetic Materials	ARO
University of Maryland - College Park	MD	Optical and Radio Frequency Communications Testbed for Scalable Networks	AFOSR
Virginia Polytechnic Institute and State University	VA	Novel Anechoic System for a Stability Wind Tunnel	ONR
University of South Carolina	SC	Mathematical Analysis for Data and Image Processing	ARO

* The awarding offices are the Army Research Office (ARO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR).

Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
California Institute of Technology	CA	Low-Noise, High-Speed, Digital Imaging for Characterizing Hypersonic Turbulence	AFOSR
Lehigh University	PA	Infrared Spectrometer for Characterizing Terahertz Photonic Bandgap Cyrstals	AFOSR
University of Illinois - Urbana-Champaign	IL	Closed-loop Feedback Optimization of Laser-Driven Shock Waves	ARO
University of Michigan	MI	Particle Velocimetry and Laser Fluorescence for Imaging Combustor Dynamics	AFOSR
University of California Scripps Institution of Oceanography	CA	High-Frequency Billboard Array	ONR
University of Georgia	GA	Nanoparticle Mass Spectrometer System	AFOSR
University of Illinois - Chicago	IL	Functionalized Nanotube Neuronal Sensors	AFOSR
Kansas State University	KS	Parallel Analysis of Models for Distributed Real-Time Embedded Systems	ARO
University of Nebraska - Lincoln	NE	Ultra-High-Speed Digital Imaging System	AFOSR
Pennsylvania State University	PA	Analysis of Cavity-Body Interactions for Supercavitating Bodies	ONR
University of Illinois - Urbana-Champaign	IL	Optical System for Micromachining, Biomedical Diagnostics and Spectroscopy	AFOSR
Drexel University	PA	Dynamic Fiber-Optic Evanescent Wave Spectroscopy	ARO
Purdue University	IN	Instrumentation for Neutral Atom Lithography	ARO
University of Missouri - Columbia	MO	Helical Coil Launcher Pulsed Power Supply and Diagnostic System	AFOSR
US Air Force Academy	CO	Intensified High Speed Camera	AFOSR
University of Wisconsin - Madison	WI	Laser Deposition with High Pressure Reflection High-Energy Electron Diffraction	AFOSR
University of Washington	WA	Supercomputing for Artificial Intelligence, Data Mining and Database Research	ONR
University of California - Santa Barbara	CA	High-Speed Digital Imaging System	ONR
New York University	NY	High-Resolution Nuclear Magnetic Resonance Spectrometer	ARO
University of California - San Diego	CA	Fabricating and Characterizing Quantum and Nanophotonic Resonant Structures	AFOSR
University of Pennsylvania	PA	Corticonic Network using Luminescent Rebroadcasting in Electron Trap	ARO
University of Arizona	AZ	Stereoscopic, Three-Dimensional Visualization for Active Flow Control	AFOSR
Massachusetts Institute of Technology	MA	Flight Test Environment for Small Airborne Autonomous Systems	ONR
University of Georgia	GA	Gas Chromatograph System for Health Assessment of Jet Propellant	AFOSR
University of California Scripps Institution of Oceanography	CA	Mobile Aerosol Radiometric System	ONR
Purdue University	IN	Rotating-Frame Sampling for Investigation of Turbomachinery High-Cycle Fatigue	AFOSR
Ohio State University	OH	Measurements of Eye, Head, and Hand Movements under Vibration	AFOSR
Northwestern University	IL	Symbolic Supercomputer for Artificial Intelligence and Cognitive Science	ONR
University of Alabama - Huntsville	AL	High Peak Power Laser for Defense of Mobile Platforms	ARO
Massachusetts Institute of Technology	MA	Intercepted Signals for Ionospheric Science	AFOSR
Cornell University	NY	Femtosecond Optical Parametric Oscillator System	ARO
University of North Carolina - Chapel Hill	NC	Supercritical Fluid Chromatography in Sensitive Equipment Decontamination	ARO
Boston University	MA	Rapid Inference of Genetic Networks in Microbes	ARO
University of Texas - Austin	TX	Coherent Ionospheric Doppler Receiver for Operations in Equatorial Regions	AFOSR
Woods Hole Oceanographic Institution	MA	Autonomous Underwater Vehicles to Study Coastal and Upper Ocean Processes	ONR
Carnegie Mellon University	PA	Ultra-High Vacuum Tribometer for Micro Electro-Mechanical Systems Tribology	AFOSR

* The awarding offices are the Army Research Office (ARO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR).

Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
University of Colorado - Boulder	CO	X-Ray Photoelectron Spectrometer for Analysis of Nanolaminate Thin Films	AFOSR
University of California - Los Angeles	CA	Spatial Light Modulators and Wavefront Sensor for Control of High Energy Lasers	AFOSR
State University of New York - Stony Brook	NY	Scalable Heterogeneous Supercomputer Built with Commodity Components	ARO
Air Force Institute of Technology	OH	Adaptive Optics Test and Experimentation	AFOSR
University of Texas - Austin	TX	Heave Compensation System for a Small Off-Shore Drilling Rig	ONR
Georgia Institute of Technology	GA	Imaging and Simulation System for Characterizing Material Behavior	AFOSR
University of Massachusetts - Lowell	MA	Nanomechanical Analyzer	AFOSR
University of Nevada - Reno	NV	Parallel Computing Cluster for High-Speed Brain Simulation Research	ONR
University of Central Florida	FL	High Performance Cluster Computing for Collaborative Large-Scale Simulation	ARO
University of Michigan	MI	Instruments for Imprint-Based Nanolithography Research	AFOSR
University of California Scripps Institution of Oceanography	CA	Nearshore Temperature, Dye, and Sediment Measuring Jet-Ski System	ONR
Rice University	TX	Near-Field Scanning Optical Microscope and Raman System for Plasmonics	AFOSR
University of Oregon	OR	Environmental Chamber for Human Integrative Physiology Studies	ARO
Yale University	CT	Laser Scattering for Diagnosis of Metalorganic Chemical Vapor Deposition	AFOSR
Michigan State University	MI	Scanning and Hybridization for Detection of Microorganisms on DNA Biochips	AFOSR
University of Delaware	DE	Acoustically Quiet System Components	ONR
Emory University	GA	High-Power Tunable Laser System	AFOSR
University of Washington	WA	Measurement of Aerosol Differential Hygroscopic Growth Rates	ONR
Duke University	NC	Time-Resolved Fluorescence Spectroscopy of Engineered Biosensor Proteins	ONR
University of New Mexico	NM	Metalorganic Chemical Vapor Deposition for Nanomaterials and Devices Research	AFOSR
Emory University	GA	Characterizing Solid Polyoxometalate Materials and Catalysts	ARO
University of California Scripps Institution of Oceanography	CA	Networked and Autonomous Acoustic Receiver Arrays and Source	ONR
Wichita State University	KS	Multiprocessor Parallel Cluster for Magnetohydrodynamic Computations	AFOSR
Oregon State University	OR	Upgrade of Argus Coastal System	ONR
University of Wisconsin - Madison	WI	Parallel Computing Cluster System for Hyperspectral Data Modeling	ONR
University of Central Florida	FL	Mixed Reality System	ONR
Rice University	TX	Optical Lattice Trap for Quantum Gases of Lithium	ARO
University of Texas - Austin	TX	Mobile X-Ray Attenuation Measurement Apparatus for Ocean Acoustic Research	ONR
University of Maryland - College Park	MD	Heterogeneous Kinetics in Solid Oxide Fuel Cells and Catalytic Reactors	ONR
University of New Mexico	NM	Advanced Optical Fibers	AFOSR
University of New Mexico	NM	Space Surveillance Simulator	AFOSR
University of Notre Dame	IN	Molecular Beam Epitaxial System for III-V Nitride Semiconductors	ONR
Drexel University	PA	Scanning Electron Microscope with X-Ray and Raman Spectrometers	ARO
Tufts University	MA	Spectroscopic Ellipsometer and Infrared Camera for Organic Thin Films Research	AFOSR
Pennsylvania State University	PA	Thermoacoustic Generator Support System	ONR
Oregon State University	OR	Pulsed Laser Deposition System for Materials Research and Device Development	ARO

* The awarding offices are the Army Research Office (ARO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR).

Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
University of California - Los Angeles	CA	Supercomputer for Turbulence Control Simulations	AFOSR
US Air Force Academy	CO	Tunable Femtosecond Laser	AFOSR
University of New Mexico	NM	Long-Wavelength Difference-Frequency Spectroscopy System	ARO
University of Illinois - Urbana-Champaign	IL	Curved Image Plate X-Ray Synchrotron Detector	AFOSR
University of Hawaii	HI	Diagnostic System	AFOSR
Georgia Institute of Technology	GA	Polymer/Single Wall Carbon Nanotubes Composite Processing	AFOSR
Carnegie Mellon University	PA	Electronic and Magnetic Characterization for Single Chip Multi-Modal Nanosensors	AFOSR
Georgia Institute of Technology	GA	Sensing and Computation for Passive Radar and Signal Detection	AFOSR
Uniformed Services University of the Health Sciences	MD	Chromate Dissociation from Paint Particles	AFOSR
University of California - Davis	CA	Atomic Force Microscope for the Study of Nanostructured Materials	ONR
Virginia Polytechnic Institute and State University	VA	Evolution of Naval Composites Subjected to Fire Threat	ONR
University of California - Davis	CA	A Virtually Mobile Ad-Hoc Wireless Security Testbed	AFOSR
Stevens Institute of Technology	NJ	High-Resolution Spectroscopic Cryo-Imaging of Solvated Polymers	ARO
University of Florida	FL	Virtual Environment: Visualization and Computation for Autonomous Vehicles	AFOSR
Old Dominion University	VA	Enhanced Visualization Capability for Modeling and Simulation	ONR
University of Southern Mississippi	MS	Above-Water UV-Visible Hyperspectral Radiometer for High Frequency Sampling	ONR
Virginia Polytechnic Institute and State University	VA	Static-Dynamic Light Scattering to Measure Molecular and Aggregate Sizes	ARO
California Institute of Technology	CA	Hybrid Wide Area Network	ARO
Pennsylvania State University	PA	Acoustic Vector Sensor Array System	ONR
University of Southern California	CA	Protein Template Directed Self-Assembly of Quantum Dot Arrays	AFOSR
New York University	NY	High-Performance Computing for Atmospheric and Oceanographic Research	ONR
University of North Carolina - Chapel Hill	NC	Portable Walkthrough and Computer-Generated Force Computation	ARO
Northwestern University	IL	In-Situ Transmission Electron Microscope Tribological System	AFOSR
University of Southern Mississippi	MS	Broadband Dielectric Spectrometer to Characterize Nanocomposite Membranes	ARO
Georgia Institute of Technology	GA	Computation for Real-Time Collaborative Design and Strategic Decision Making	ONR
University of California Scripps Institution of Oceanography	CA	Hydrodynamics Studies	ONR
State University of New York - Stony Brook	NY	Coherent Control of Atomic and Molecular Dynamics	ONR
Pennsylvania State University	PA	Laser Vibrometry for Improving Vehicle Noise and Transducer Array Control	ONR
Northwestern University	IL	Scanning Probe Microscope for Chemical Study of Dip-Pen Nanolithography	AFOSR
Catholic University of America	DC	Rapid Prototyping System for Micro-Machined Electromagnetic Surfaces	ONR
University of Missouri - Rolla	MO	Robotic Friction Stir Welding Machine	ONR
University of California - Santa Barbara	CA	High-Frequency Measurements for Radio-Frequency and Microwave Devices	ONR, AFOSR
Pennsylvania State University	PA	Multi-purpose Physical Vapor Deposition System for Combinatorial Metallizations	AFOSR
University of Arizona	AZ	Scalable Shared Memory Supercomputer Replacement System	AFOSR
Virginia Commonwealth University	VA	Imprint Nanolithography System	AFOSR
Emory University	GA	Workstation Cluster for Computational Studies of Chemical Reaction	AFOSR

* The awarding offices are the Army Research Office (ARO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR).

Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
North Carolina State University	NC	Optical Probe for Radio-Frequency Photonics and Waveguide Characterization	ARO
Northwestern University	IL	Gas Chromatography and Mass Spectrometry for Structures with Polymers	AFOSR
Boston University	MA	Computation of Turbulent Sources of Hydrodynamic Noise	ONR
University of Connecticut	CT	Evapotranspiration, Interception, and Runoff Production in the Seasonal Tropics	ARO
Northwestern University	IL	Accelerated Materials Prototyping	AFOSR
Massachusetts Institute of Technology	MA	Microwave Generator for Superconducting Qubits in Quantum Computing	AFOSR
Miami University	OH	Terahertz Spectroscopy	AFOSR
Texas Tech University	TX	Diagnostics for Performance Evaluation of Nano-engineered Energetic Materials	ARO
University of Pennsylvania	PA	Multiple Agents in Groups for Networked, Unmanned Missions	ARO
Colorado School of Mines	CO	Diesel Spray Characterization with Ballistic Imaging and Infrared Scattering	ARO
University of Connecticut	CT	Distributed Dynamic Decision-making and Multi-echelon Command Decision-making	ONR
Tulane University	LA	Mobile Testbed for Object Recognition and Learning Research	ARO
University of Miami	FL	Microstructure Profiling System for Coastal and Marginal Seas	ONR
Pennsylvania State University	PA	Surveillance Sensor Network Operational Testbed	ARO
University of Colorado - Boulder	CO	Nonlinear Microwave and Millimeter-wave Component Characterization	ARO
University of Delaware	DE	Molecular Beam Epitaxy for Photonic Nanostructures	ONR
University of Rochester	NY	Piezoelectric Materials	ONR
Massachusetts Institute of Technology	MA	Direct Thermal-to-Electrical Conversion Test-Bed System	ONR
Air Force Institute of Technology	OH	Navigation Technology Sensor Suite	AFOSR
California Institute of Technology	CA	Mechanical Response of Micro and Biomechanical Systems	ARO
Pennsylvania State University	PA	Instrumentation for Complex Systems Failure Research	ARO
University of Florida	FL	Metal Deposition System for Metal-Semiconductor-Metal Photodetectors	ARO
Georgia Institute of Technology	GA	Rapidly Reconfigurable High Performance Computing Cluster	AFOSR
North Carolina State University	NC	Gas Chromatography and Mass Spectrometry for Membrane Transport	AFOSR
Pennsylvania State University	PA	Spectrometer for In-Situ Raman Spectroscopy of Microwave Reactions	ONR
Ohio State University	OH	Flow Diagnostics and Control	AFOSR
University of Washington	WA	Shallow Water Electric Field Sensors for Ocean Electric Field Studies	ONR
California Institute of Technology	CA	Characterization of Plasmonic and Optical Microcavity Light Emitters	AFOSR
Rutgers University	NJ	Autonomous Relocateable Rapid Environmental Assessment Capability	ONR
Case Western Reserve University	OH	Digital Additive and Laser Subtractive Rapid Manufacturing	AFOSR
US Air Force Academy	CO	Spatial Disorientation Tracking and Monitoring	AFOSR
University of South Carolina	SC	Computational Approach to Design of Sensing Devices and Systems	ARO
Pennsylvania State University	PA	Enhanced Visualization Techniques	ONR
University of Florida	FL	Heterogeneous Network Testbed	ARO
Arizona State University	AZ	Multimode Large Format Scanning Probe Microscopy	AFOSR
Boston University	MA	Plasma System to Study Electronic Structure of Material Surface and Interface	ARO

* The awarding offices are the Army Research Office (ARO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR).

Institution	State	Brief Description of Instrumentation or Research it Supports	Awarding Office(s)
University of Rochester	NY	Laser-Based Transmitter for Gigahertz-Rate Optical Quantum Communications	AFOSR
Florida State University	FL	Profiling System for Ocean Turbulence Studies	ONR
Virginia Commonwealth University	VA	Retinal Fluorescein Angiography to Study Treatment for Decompression Sickness	ONR
Florida State University	FL	Real-Time Computer Vision Research	ARO
University of Minnesota	MN	Nanosensor Fabrication Studies	ONR
Boston University	MA	Threat Networks and Threatened Networks: Stabilization and Immunization	ONR
Woods Hole Oceanographic Institution	MA	Broadband Acoustic Resonance Classification of Swimbladder-Bearing Fish	ONR
University of Washington	WA	Spark Plasma Sintering for Nanostructured Smart Materials	AFOSR
Massachusetts Institute of Technology	MA	Photonic Bandgap and Microwave Amplifier Research	AFOSR
University of California - Santa Barbara	CA	Aerodynamic Breakup of Liquid Drops in Supersonic Flows	ARO
Oklahoma State University	OK	Simulations of Processes in Energetic Materials	ARO
University of California - Santa Barbara	CA	Scanning Laser Vibrometer for Charactering Micro and Nanomechanical Devices	AFOSR
University of Arizona	AZ	Imaging Polarimeter for Space Situational Awareness	AFOSR
University of Central Florida	FL	Near-Infrared Spectrofluorometer for Characterization of Optical Limiting Materials	AFOSR
North Carolina State University	NC	Fabrication and Characterization of Metallic Nanostructures used in Sensors	ARO
University of Nevada - Reno	NV	Electron-Beam Source and Diagnostic Instrumentation for Air-Plasma Research	AFOSR
University of Connecticut	CT	Multi-User Quantum Key Distribution with Multi-Wavelength Optical Networks	ARO
Northwestern University	IL	Contact Failure Transition	ONR
Georgia Institute of Technology	GA	Dual-Beam Focused Ion-Beam Microscope	AFOSR
Virginia Commonwealth University	VA	Studies of Combat Trauma and Multisystem Organ Failure	ONR
Northwestern University	IL	Raman Spectroscopy of Energy and Electron Transfer in Photovoltaic Materials	ONR
Georgia Institute of Technology	GA	Polymer Characterization to Enhance Infrared-Reflective Optical Tags	ONR
University of Washington	WA	Acoustic System for Synthetic Aperture Sonar Detection of Mines	ONR
Pennsylvania State University	PA	Hybrid Physical-Chemical Vapor Deposition System for Multifunctional Materials	ONR
Brown University	RI	Nano and Molecular Scale Positioning, Assembly, Manipulation, and Probing	AFOSR
West Virginia University	WV	Nanobiotechnology Research	AFOSR
University of Illinois - Chicago	IL	Computation and Simulation Research on Duncan-Mortensen-Zakai Equation	ARO
Arizona State University	AZ	Information Testbed for Intrusion and Damage Assessment	AFOSR
Pennsylvania State University	PA	Spectroscopy and Cinematography for F88Systems Study	AFOSR
University of California - Los Angeles	CA	Molding and Characterization of High-Frequency Meta-Materials	ONR
Boston University	MA	Argon Ion Laser to Measure Stress and Strain Micro Electro-Mechanical Systems	AFOSR
University of Tennessee	TN	Scanning Probe Microscope	ARO
University of Arkansas	AR	Instrumentation for Separation and Purification of Soluble Carbon Nanotubes	ARO

* The awarding offices are the Army Research Office (ARO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR).